

SHRI MATA VAISHNO DEVI UNIVERSITY, KATRA
School of Biotechnology

M.Sc. (Biotechnology) Minor- I & II Examination Combined (Even Semester) 2018-19

Entry No:

Date: 1.10.2019

Total Number of Pages: [1]

Total Number of Questions: []

Course Title: Environmental Studies

Course Code: BTL2304

Time Allowed: 1.5 Hours

Max Marks: [30]

Instructions / NOTE

- i. Support your answer with neat freehand sketches/diagrams, wherever appropriate.

Section – A (Attempt any four Questions)

1. (a) Define ecosystem or 10 % law of an ecosystem. What are the biotic components of an ecosystem? [2.5] CO1
- (b) Define ecological succession. [2.5] CO1
- (c) Give a brief contribution of M S Swaminathan in environment. [2.5] CO2
- (d) Define food chain and food web. [2.5] CO1
- (e) Define ecological pyramids of number with example. [2.5] CO1
- (f) Name the types of forest in terrestrial ecosystem. [2.5] CO1

Section – B (Attempt any four Questions)

2. Describe water cycle and nitrogen cycle. [05] CO3
3. Describe the non renewable energy sources and their impact on air pollution. [05] CO3
4. Write different types of grassland ecosystem and its conservation. [05] CO2
5. Write the names of various methods to utilize solar energy giving advantages. [05] CO1
6. Give a brief account on impact of any two man - made disasters on environment. [05] CO2
7. Write a brief note on energy flow in the ecosystem. [05] CO2
8. Give three reasons why Y shaped energy flow model is more realistic and practical. [05] CO1

Course Outcomes

1. Understand about basics of environment and the impact of human activities.
2. Understand the importance of multiple disciplines in addressing the environmental issues.
3. Understand sustainable environmental management approaches.

CO	Questions Mapping	Total Marks	Total Number of Students (to be appeared in Exam)
CO1	1(a,b,d,e,f)5,8	32.5	
CO2	1(c) 4,7	13	
CO3	2, 3,	5	

SHRI MATA VAISHNO DEVI UNIVERSITY, KATRA
School of Biotechnology
B. Tech.(Engineering) Major Examination (Odd) 2019-20

Entry No:

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Date: 5-12-2019

Total Number of Pages: [02]

Total Number of Questions: [07]

Course Title: Environmental Studies

Course Code: BTL 2304

Time Allowed: 3.0 Hours

Max Marks: [50]

Section – A			
Q1.	(a) The pyramid of energy in an ecosystem is always upright. True or False	[01]	CO1
	(b) Humans are (i) Producers, (ii) Consumers, (iii) Decomposers, (iv) none	[01]	CO2
	(c) Deforestation generally decreases (i) Rainfall, (ii) Soil erosion, (iii) Draught, (iv) Global warming or World Environment Day is on	[01]	CO1
	(d) Define biomagnification.	[01]	CO1
	(e) Salim Ali is known for (i) bird study (ii) journalism (iii) photography		
Q2.	(a) Write briefly about forest ecosystem or its application.	[02]	CO3
	(b) Describe the carbon cycle or nitrogen cycle.	[02]	CO1
	(c) Discuss briefly the need for public awareness about environment.	[02]	CO2
	or Define Southern oscillations.		
	(d) What are the renewal and non-renewal resources? Explain with examples.	[02]	CO1
	(e) What are the problems caused by dams?	[02]	CO1
Section – B			
Q3.	(a) Discuss briefly the various air pollutants.	[05]	CO1
	(b) Write the various measures for prevention of malaria or air pollution.	[02]	CO1
	or Discuss about Environmental Protection Law 1983.		
Q4.	(a) Discuss the various approaches towards energy conservation in India.	[07]	CO2
	or (b) Discuss environmental related social issues in India.		CO3
Q5.	(a) Discuss the various methods for the disposal of solid waste including e-waste.	[07]	CO2
	or (b) Discuss the role of information technology in environment and human health.		CO3
Q6.	(a) Write different ways of saving water in agriculture and urban settings.	[03]	CO2
	(b) Describe how rainwater harvesting can be done.	[04]	CO3
Q7.	(a) Write an account on malnutrition of women and children.	[04]	CO3
	(b) List the various birth control techniques.	[03]	CO2
	or (c) Write the differences between infectious and non-infectious diseases.	[07]	CO2

Course Outcomes:

After successful completion of this course, students shall be able to:

CO1: Understand about basics of environment and the impact of human activities

CO2: Understand the importance of multiple disciplines in addressing environmental issues

CO3: Understand sustainable environmental management approaches